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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,434	07/22/2005	Andreas Eckel	941-012025-US (PAR)	7529
2512	7590	10/26/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			MCELHENY JR, DONALD E	
			ART UNIT	PAPER NUMBER

2857

DATE MAILED: 10/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/519,434

Applicant(s)

ECKEL, ANDREAS

Examiner

Donald E. McElheny, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/22/05 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 7/22/05.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

1. The drawings are objected to for the following reasons:

Figures 1, 2 and 3 show black boxes that, though having reference numerals, show nothing meaningful as to the intent of these figures and black boxes. At least figures 1 and 3 must be appropriately labeled by short descriptive labeling with either well known symbols, words, or phrases to facilitate their understanding for Official Gazette and searcher review purposes.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), and amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b), are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The disclosure is objected to because of the following informalities: The specification should be carefully checked to be put in proper grammatical and idiomatic U.S. English language. It should also be corrected to eliminate references to specific claims, such as occurs throughout the written specification, as claims may change numbering upon allowance and issue.

Appropriate correction is required.

3. The following is a quotation of the second and fourth paragraphs of 35 U.S.C.

112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

4. Claims 1-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preamble of claim 24 states the inventive method as drawn to "determining the altitude of a mobile communication terminal". However, the body of the claim never accomplishes such purpose, and therefore the claim appears to be incomplete and indefinite as to how the stated limitations ever accomplish such. Furthermore, the method steps appear to only state data gathering type steps and never positively recite a final limitation to accomplish a useful, concrete and tangible result that relates to the real physical world, which is required under 35 U.S.C. 101 for setting forth a statutory invention; therefore the claims are also incomplete for this basis. Dependent claims are not seen to resolve the above stated deficiencies.

Claims 1, 16 and 24 recite "determining the horizontal position" of the mobile terminal. But what this represents, is relative to or in relationship with, is unclear and indefinite. Does this limitation intend to cover some sort of interpretation of the horizontal orientation of the terminal, such as its direction of tilt? Is this a geographic location? The breadth of this limitation, and hence these claims, appear to be broader

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than the disclosed intended and supported basis. Though later dependent claims may further define the usage of the term "horizontal", even when more explicitly defined (e.g. 8, 28) as relating to some physical landmark, it is still not positively and clearly set forth what this "horizontal" relationship is with respect to the mobile terminal. Such could still be some physical tilt orientation with respect to the ground or the landmark, or some other unsupported and undisclosed interpretation. None of the independent nor dependent claims are seen to fully and properly claim this aspect of the disclosed invention, and thus the claims appear to be incomplete of essential and critical inventive components and relationships. For similar reasons the claimed feature of "ground level" can be read as being ground level relative to the mobile terminal; if the terminal is set on the ground, then certainly it is inherently at ground level. Since in some claims the "altitude of the communication terminal" is also set forth, such appears to make the "ground level" of some other relationship than an interpretation such as altitude above sea level, which appears to be what the written specification intends and is only supportive of.

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 24-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter and the claimed invention lacks patentable utility.

Please be advised that the "Interim Guidelines for Examination of Patent Applications for Subject Matter Eligibility" was signed on Oct 26, 2005 and posted on the uspto.gov website. The link is:

<http://www.uspto.gov/web/offices/pac/dapp/ogsheet.html>

Also see MPEP 2106, which covers computer implemented inventions and the manner in which they may be claimed and find statutory basis under 35 U.S.C. 101.

While the claims do not always positively and clearly recite and require any actual computer implementation, even if/when there were such claimed basis they would still fail to meet the latest Guidelines criteria for having statutory basis in any type (e.g. method, apparatus, medium, etc.) of claimed invention as the instant claims stand.

These claims fail to meet the minimal requirement of a useful, concrete and tangible result of a real physical world interactive end result supported by any algorithm steps, or structure supporting such calculated step with an end result, where the end result limitation/data supports the invention being used in a practical useful, concrete and tangible real world combination manner. As the above updated Guidelines now state, structure (e.g. input devices, sensors, databases, etc.) of any type that supply data for calculations (done by human and/or computer) do not make the claimed invention fall within statutory subject matter until there occurs explicitly a claiming of and meeting the actualization in the real world of a useful, concrete and tangible result. Note that algorithmic based inventions, especially mathematical or abstract ideas based, where performed using a computer, such computerization still may not make an overall computerized system fall into permitted patentable statutory subject matter. The

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instant claims fail to explicitly and clearly set forth any end result physical world transformation of any data calculations so as to relate to the real world as/for a tangible practical use. The step(s) may still be at best just internal computer calculations absent any tangible real world relationship. External supply to other structural systems, to a user via display or printing, or some other practical tangible result with the clear useful purpose of such "output", must somehow be minimally claimed for establishing statutory subject matter.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-11, 13, 15-19, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over McBurney et al. (6,055,477 A).

As best as can be determined from the indefinite and incomplete claims and a reading of applicant's written specification, this reference (and others of record) meet the apparently claimed concepts and inventive features. Namely McBurney et al. teach the taking of atmospheric pressure readings, location readings and the position and elevation or altitude determination of the ground level of interest at or below the mobile user or communication system object/device (e.g. mobile communication device) and derive the corrected and more accurate altitude of the user or system. From a reading of applicant's specification it appears the different claim terminology is equivalently and operatively fully met by the teachings of this reference. For example, applicant's use of

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the limitation "horizontal position" is met by the reference's teaching of determining the latitude and longitude coordinates of the ground position of interest. The taught communications system and whatever it may be incorporated into, be it on the ground or in the air (e.g. aircraft), are equivalent to the claimed "mobile communication terminal". The taught communications system may input the various position data automatically by various means such as a GPS system, or a remote station transmitting such equivalent information, or may be entered manually by the user when such data is known, such as elevation and/or horizontal geographic location of the user/system when available (e.g. taught use of landmarks such as trail or road marker signs, or known landmarks, radio broadcasts that provide trailhead altitude and geographic location data, etc.). Such data are used to calibrate the system for more accurate pressure-altitude relationship determination and compensated altitude measurement for surveying or navigation purposes. The geographic location data may also be entered by use of stored and displayed geographic maps. Various alternatives well known in the prior art are discussed in the background of the invention section of McBurney et al. which may be incorporated with their system, and explicitly do so in later discussion of their own system. Thus variations in user input techniques submitted in dependent 2-11, 13, 15, 17-19, 23-27 are not found by one of ordinary skill in the art to be involve the concept of invention over the teachings of the prior art at the time of filing of the instant claimed invention.

9. Prior art not applied against the claims is cited as pertinent prior art, many of which are pertinent to the point of meeting most or all of the claimed inventive features.

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Note the prior art cited in the IDS has been applied against the claims in the corresponding application, art which applicant has summarily dismissed in the IDS submission. Hedrick (6,462,703 B2) also teaches an altitude measurement and correction system using position location of the mobile system, and likewise meets many of the claims. The combination of features found with claims 12, 14, 20-22, and 28-31, where the additional data processing and user interactive requirements are claimed, are not seen in the prior art.; nevertheless such can only constitute patentable subject matter if applicant has disclosed criticality and inventive purpose in the claimed combination of use of such notoriously well known prior art components.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald McElheny, Jr. whose telephone number is 571-272-2218. The examiner can normally be reached on Monday-Thursday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoff Marc, can be reached on weekdays at telephone number 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Donald E. McElheny, Jr.
Primary Examiner
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